GOD ENGINE™

SkyGW-404

Quick Operation Manual

V1.0

Table of Contents

1. Introduction 3
    1.1 Package Contents 4
    1.2 Product Specification 4
    1.3 Main Features 4
    1.4 Minimum System Requirements 5
2. SkyGW-404 Application and Installation Procedure Diagram 6
    2.1 SkyGW-404 Application 6
    2.2 Before Proceed 7
    2.3 SkyGW-404 Installation Procedure Diagram 7
3. Install Skype Software 8
4. SkyGW-404 Hardware Setup 15
    4.1 SkyGW-404 Hardware Description 15
    4.2 Connect SkyGW-404 to a server PC 16
    4.3 Connect SkyGW-404 to PBX 19
5. Install SkyGW4 Software 20
    5.1 SkyGW4 Software Installation 20

1. Introduction

Nowadays Skype™ has been a popular IM for voice/chat application and has been a big community worldwide. However, Skype scares enterprises for its strict security. In order to prevent employee sending out confidential information easily, many companies prohibit Skype usage in office. With the increasing Skype user base and possible huge phone bill reduction, many companies would like to have Skype applications, but still worry about security issues. SkyGW-404, a four port Skype gateway product can help enterprise solve the dilemma.

After connecting SkyGW-404 with company's existing PBX, employees can make/receive Skype calls through user's extension. In addition to 4 FXS ports support for Skype, there are 4 FXO ports in SkyGW-404 for you to have the PSTN line when the corresponding port is not occupied by a Skype call. Employees don't need to install Skype in personal PC to increase MIS's burdens and security concerns. Through Skype's click to call function, 0800 customer service call can be replaced by a free Skype call. Enterprise can benefit cheaper communication fee and even better communication platform for B2B through the new office telephone platform.

Furthermore SkyGW-404 provides a very simple way to contact colleagues. Usually you can call colleague's office extension number first and then call his/her mobile number if he/she is not in office. With SkyGW-404 Cheese button function, you call colleague's extension number with prefix "＊" key and press "#" key all the way until you find him. You don't need to memorize any phone numbers. User preset a contact table with contact's reachable phone numbers. There are two kinds of contact tables, namely, Public and Private Contact Table. Employees can maintain own Private contact table through web style updates without MIS's help.

In addition, SkyGW-404 has flexible Skype call management and statistics. MIS can manage SkyGW-404 remotely. SkyGW-404 also sends out immediate SMS alert to MIS if any failure happens.

Thanks for choosing this innovative and user friendly SkyGW-404 product.

1.1 Package Contents

- One SkyGW-404 device
- One type B USB cable(Male A, Male B)
- Four telephone cables(RJ-11)
- One installation CD
- One DC power adapter(5V/3Amp)

1.2 Product Specification

- One USB port (Type B receptacle connector) to connect to PC USB port
- Dip switch for devices cascading up to 16 FXS & FXO ports
- One reset button to reset SkyGW-404 hardware and firmware
- 4 FXS ports for connecting to PBX's CO ports
- 4 FXO ports for CO
- Skype V. 2.5, 3.0(3.0.0.216 above) and 3.1 compatible
- LED: On/Off, blinking per FXO & FXS port connection & status
- Power: DC 5V power adapter with maximum 3Amp current rating

1.3 Main Features

- Connect Skype through office extension phones, no need of microphones, speakers and everyone's PC
- Support maximum 4 independent Skype calls concurrently
- 4 FXS ports for Skype application and 4 FXO for landline when the corresponding FXS port is not busy
- Support devices cascading up to 16 FXS/FXO ports in one PC
- Support international busy tones
- Only need an unique corporate Skype account for contacts
- Make both Skype and PSTN calls with existing office extension phones
- Support Speed Dial(up to 20 digits) or SkypeOut™ calls directly through the office extension phone keypad dialing
- Receive a PSTN or Skype call in the way as user does with office extension phones
- Cheese Button Dialing: If Skype quality is not good or contact doesn't answer your call …Just press "#" key through phone keypad to switch to a presetting SkypeOut or PSTN call
- "Just remember extension number for contact": Need to find your colleague?

All you need to remember now is his/her extension number. Ex. Dial “*” + extension “168” no matter he/she is in office or not. If the connection is bad or no answer, then press a single “#” key(Cheese Button) to dial his/her preset alternative connections (Home, remote office, SkypeOut,…,etc.) without dialing or memorizing lengthy phone numbers

- Easy of use and user friendly interface
- Support CDR (Call Detail Record) for view and back up.
- Support public and private contacts phonebook
- Allow every user to export personal Skype contacts into SkyGW4 private phonebook via web interface (IE, Internet Explorer).
- Automatically check SkypeOut credit and send notification via SMS for MIS
- Advanced operation administration messages like HW/SW error, Skype/SkypeOut status & call connection status

1.4 Minimum System Requirements

- One Computer running at 3.2 GHz or quicker, 1024 MB RAM with a USB port and a CD-ROM drive
- Microsoft Windows XP (Service Pack 2)
- 100MB Free Hard Disk Space at least
- Skype Version 2.5, 3.0(above 3.0.0.216) or 3.1
- 128 kbps Internet connection (ADSL, Cable Modem…)
- Four available PSTN channels in PBX

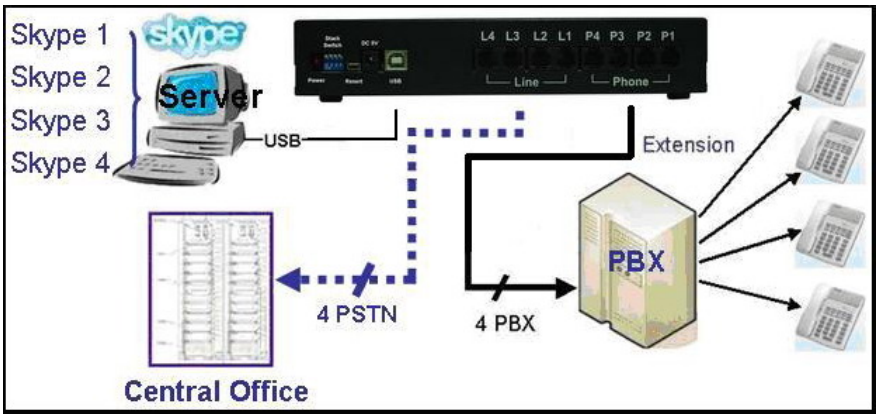
2. SkyGW-404 Application and Installation Procedure Diagram

This section will guide user how to use SkyGW-404 and illustrate installation procedures.

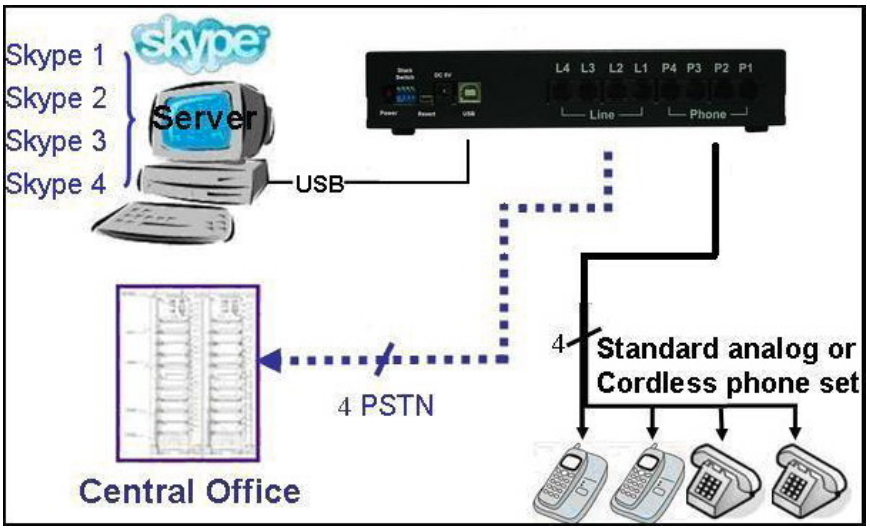
2.1 SkyGW-404 Application

SkyGW-404 can integrate with enterprise PBX system as application A. Or SkyGW-404 can be a SOHO IP-PBX as application B.

【Application A】Connect SkyGW-404 with PBX: User can connect 4 FXS ports of SkyGW-404 to PBX trunk ports and connect 4 landlines with SkyGW-404 4 FXO ports.



【Application B】As a simple IP-PBX: Connect 4 FXS ports of SkyGW-404 with 4 analog phones or cordless phones and 4 FXO ports with landlines.



2.2 Before Proceed

Before user starts to install SkyGW-404 software, please take following notes:

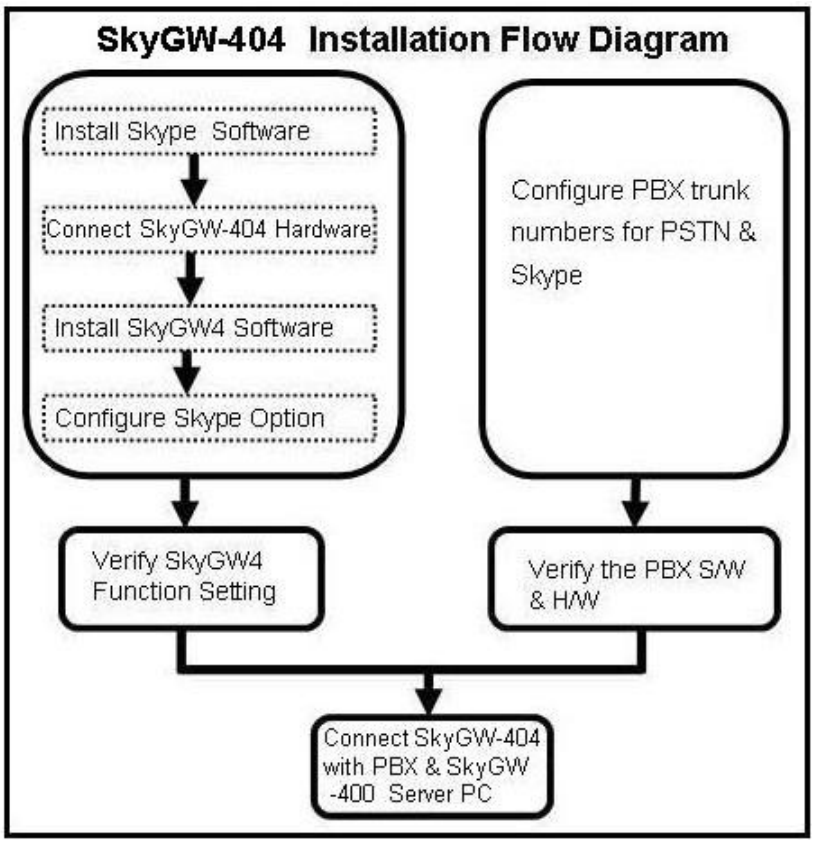
1. Make sure that the PC user wants to install SkyGW-404 is with Windows XP +Service Pack 2.
2. Make sure SkyGW-404 server PC installed with appropriate Skype version like 2.5, 3.0(above 3.0.0.216) and 3.1.
3. Make sure SkyGW-404 server PC has a dedicated broadband access to ensure voice quality.

Note：1. For later content in the user manual, we call the PC installed with SkyGW-404 as SkyGW-404 server PC.

2. We suggest there are less application programs installed on the SkyGW-404 server PC except applications like Anti-virus and Skype to ensure SkyGW-404 operation working well.

2.3 SkyGW-404 Installation Procedure Diagram

Below is SkyGW-404 installation flow diagram.



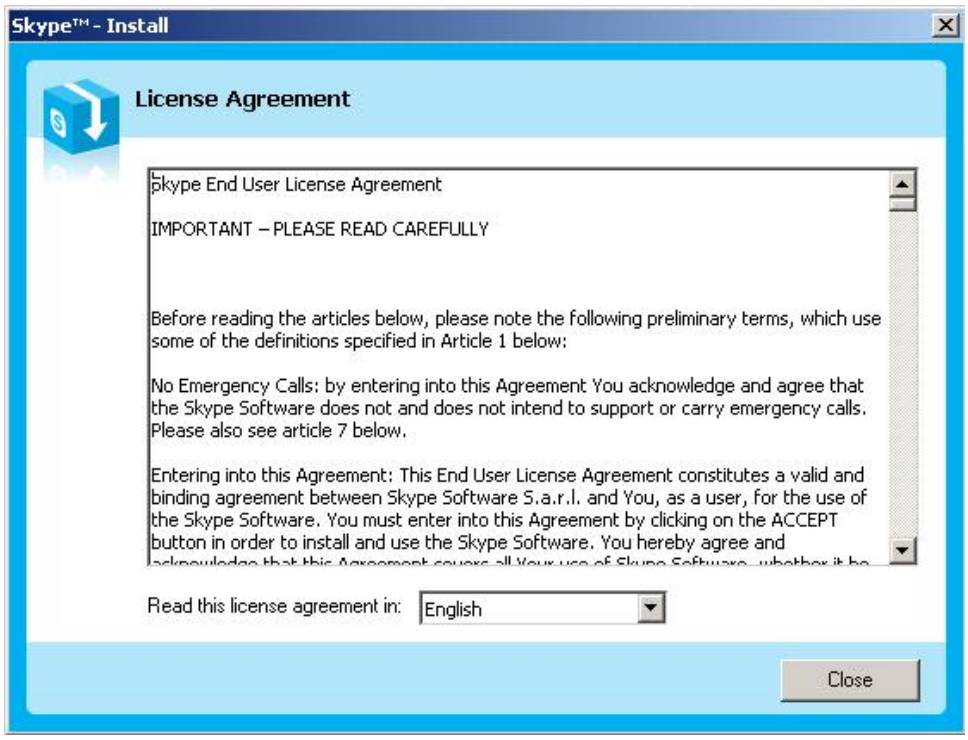
3. Install Skype Software

Before installing SkyGW-404 hardware or software, user should install Skype software on SkyGW-404 server PC first. If user already has Skype V2.5, 3.0(above 3.0.0.216) or 3.1 installed, user can skip this section and move to chapter 5 SkyGW-404 Hardware Setup in this manual. If not, please download Skype V3.1 from www.Skype.com. Skype might change API for the new release, we can't guarantee our current SkyGW-404 AP can work with the new update seamlessly. **Before getting updated SkyGW4 software, we recommend you not to upgrade Skype version to prevent possible troubles.**

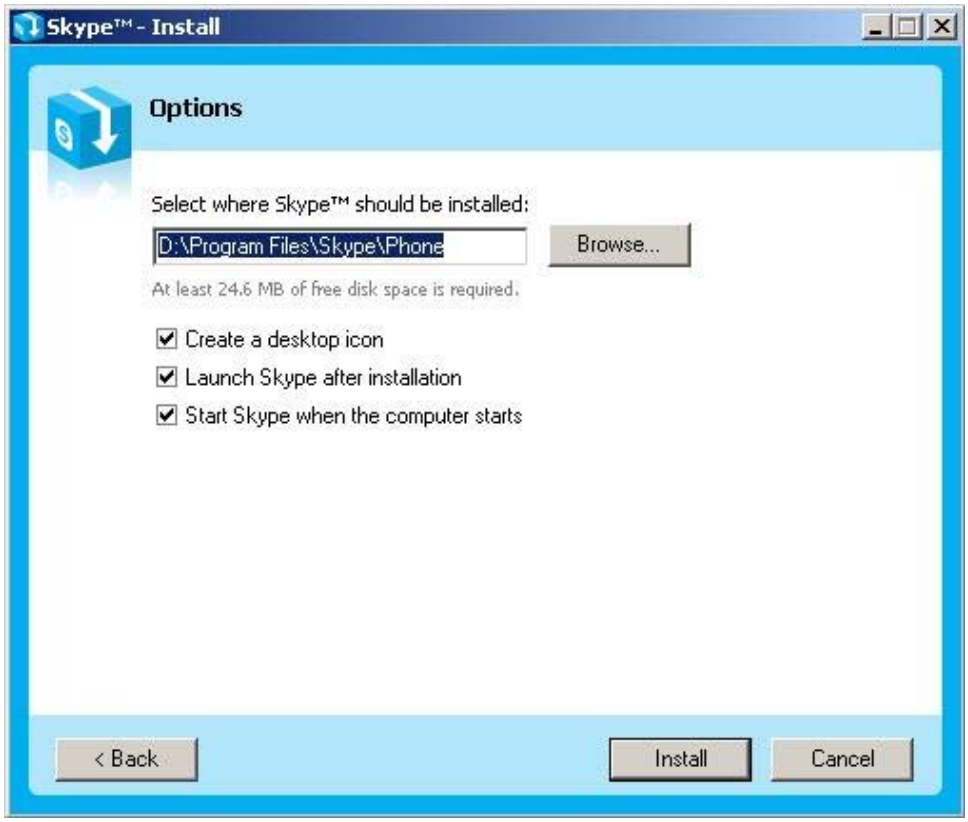
To install Skype software:

1. Get Skype v3.1 from Skype web site Http://www.skype.com . Run Skype Setup program.

2. There appears a Skype welcome window as below. Follow blue circles 1~3 to select a language by scrolling the bar, accept **Skype End User License Agreement** and click **Install**.



3. If user chooses **Options** button in the previous step, an **Options** window will pop up and user can choose preferred installation folder by **Browse**. User can choose to check boxes for **Create a desktop icon**, **Launch Skype after installation**, or **Start Skype when the computer starts**. Then click **Install**. If user doesn't click Options for configuration, the default setting will enable these three settings.



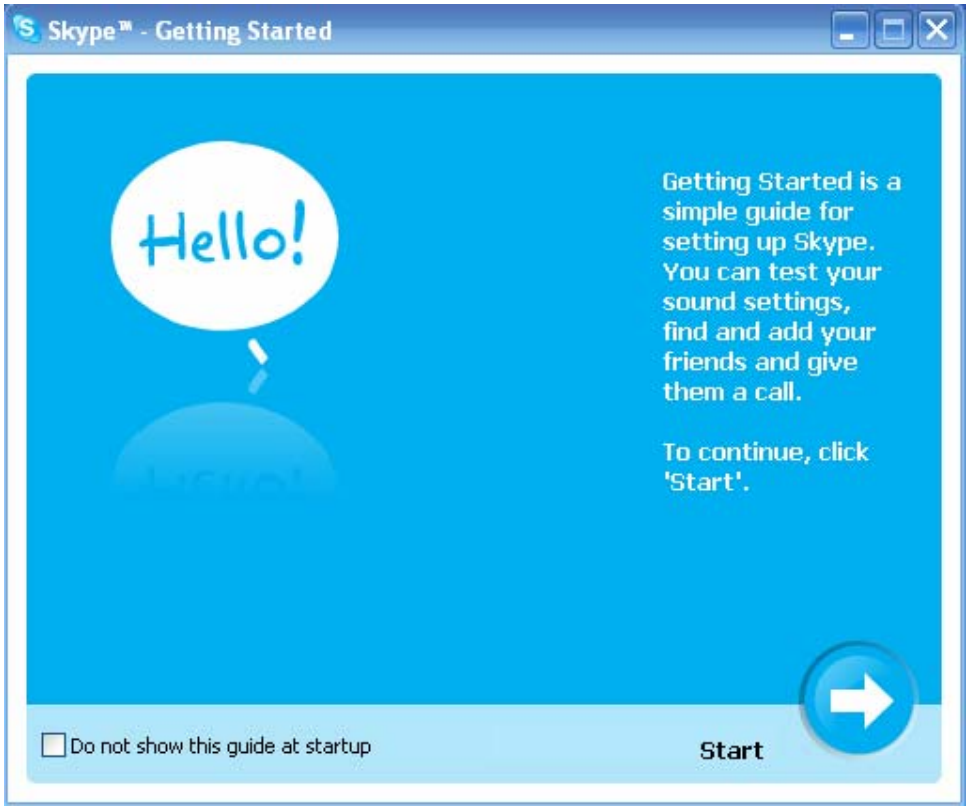
Note: User can always click Back to go back to the previous step.

4. The **Free! Google Toolbar for Internet Explorer** screen will pop out. User can choose to check boxes for **Install the free Google Toolbar**. Then click **Next** to Install or choose **Cancel**.

5. After installation, Skype will ask for Create a new Skype Account. Then click **Next**.

6. User can provide e–mail address and country information and then click **Sign In**.

7. A **Getting Started** window comes up. Press **Start** button to get a simple guide for setting up Skype.



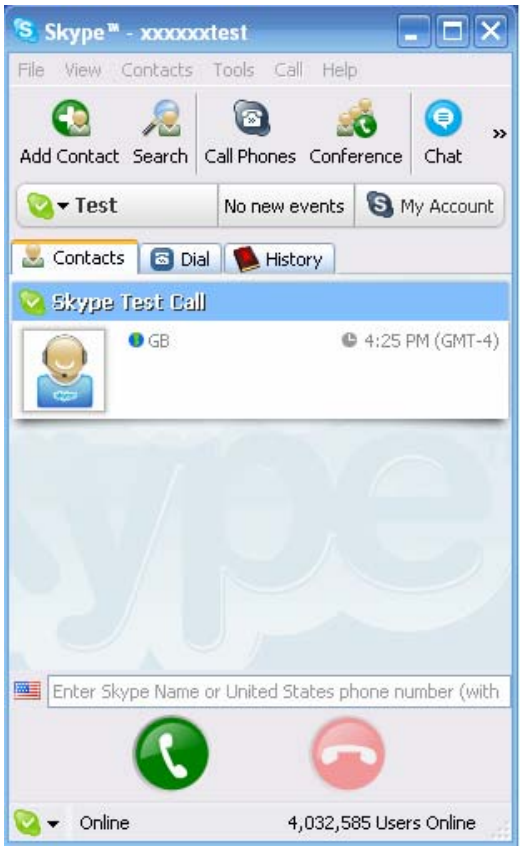
8. The next window will help user to check your sound settings by making a Skype test call. Click **Next**.

9. The next window will guide user to add friends to user's Skype contact list. Click **Next**.

10. Then user can try to call friends. Click **Next**.

11. Next window will guide user to call ordinary phones with Skype(SkypeOut) and click **Finish**.

12. Next, Skype main window will pop up and user can start to enjoy Skype.

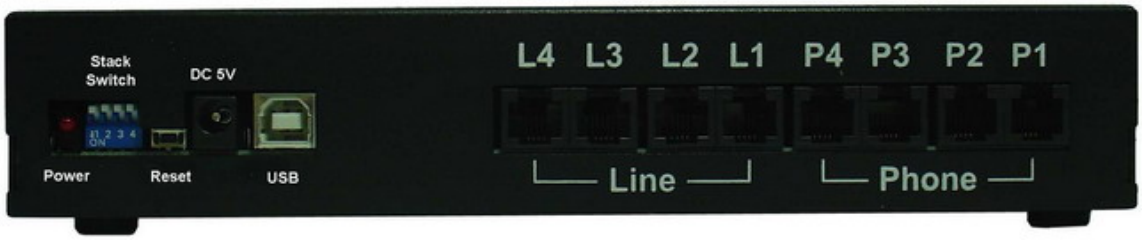


4. SkyGW-404 Hardware Setup

This section shows how to connect SkyGW-404 to SkyGW-404 server PC and PBX.

4.1 SkyGW-404 Hardware Description

SkyGW-404 rear panel



1. **Power LED:** Red LED is light when power is on.
2. **Stack Switch:** SkyGW4 can stack with another SkyGW4 to add more Skype channels through appropriate dip switch setting.
3. **Reset:** Hardware reset.
4. **5V DC:** Power socket to connect external DC power adapter(5V/3Amp).
5. **USB Port:** B type USB connector to connect to PC USB port.
6. **Line1 to Line 4:** 4 FXO ports to connect to landlines.
7. **Phone1 to Phone 4:** 4 FXS ports to connect PBX trunk ports.

SkyGW4 front panel

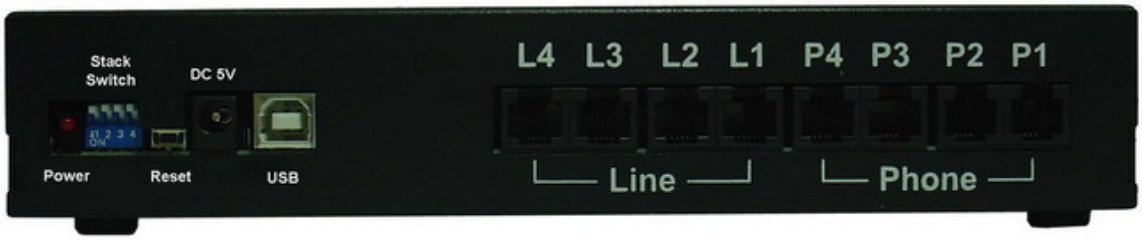
1. **P1 to P4 LEDs:** Stand for status of Phone1 to Phone 4. For example: P1 LED represents Phone1.
2. **L1 to L4 LEDs:** Stand for status of Line1 to Line 4. For example: L1 LED represents Line1.

【Note】

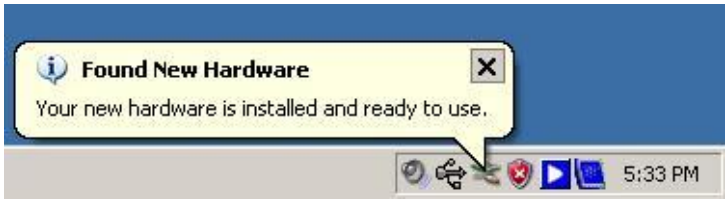
1. **PBX**：Private Branch Exchange
2. **PSTN**：Public Switched Telephone Network.
3. **FXS**：Foreign Exchange Station which can connect with regular phone, electrograph, or PBX PSTN card.

4. **FXO**：Foreign Exchange Office which can connect with landline or PBX extension card.

4.2 Connect SkyGW-404 to a server PC

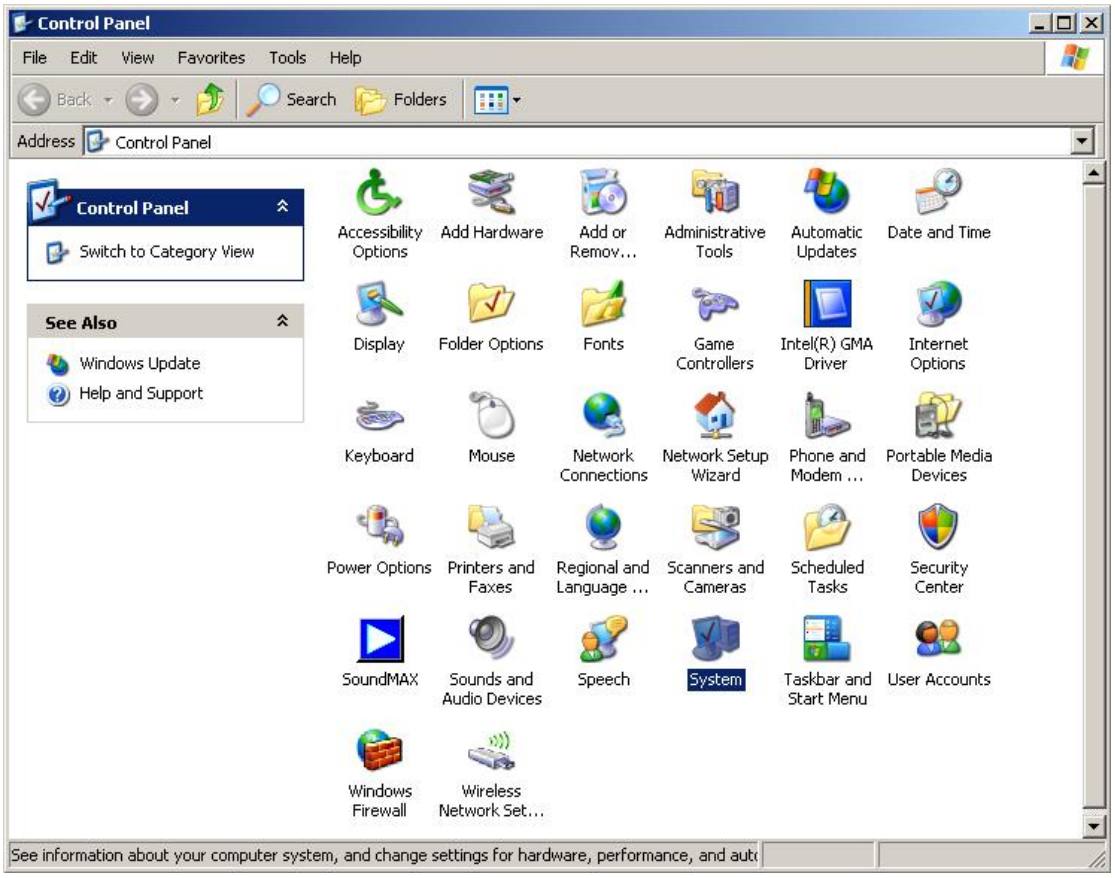


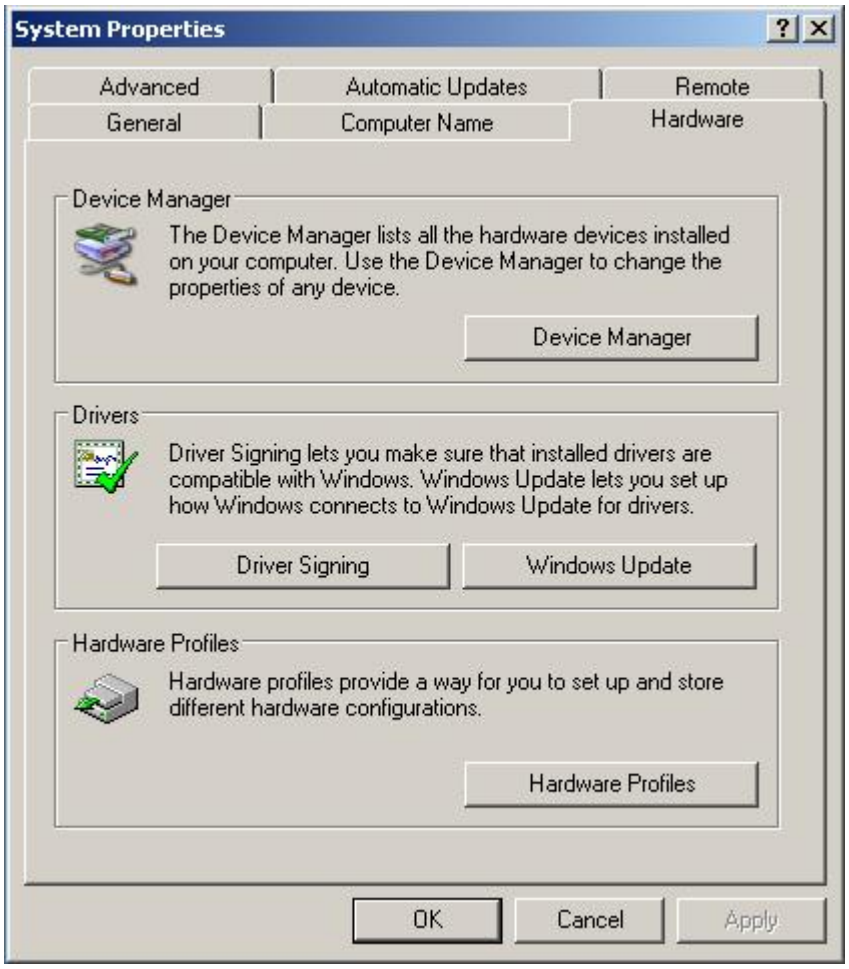
1. Connect the 5V/3A power adapter to 5V DC power socket. The power LED indicator is always on after plugging in power adapter.
2. Connect SkyGW-404 to a server PC with the supplied USB Cable.
3. After SkyGW-404 is connected to the computer, the **“Found New Hardware”** window will show up in the right down corner of Windows desktop as below figure:

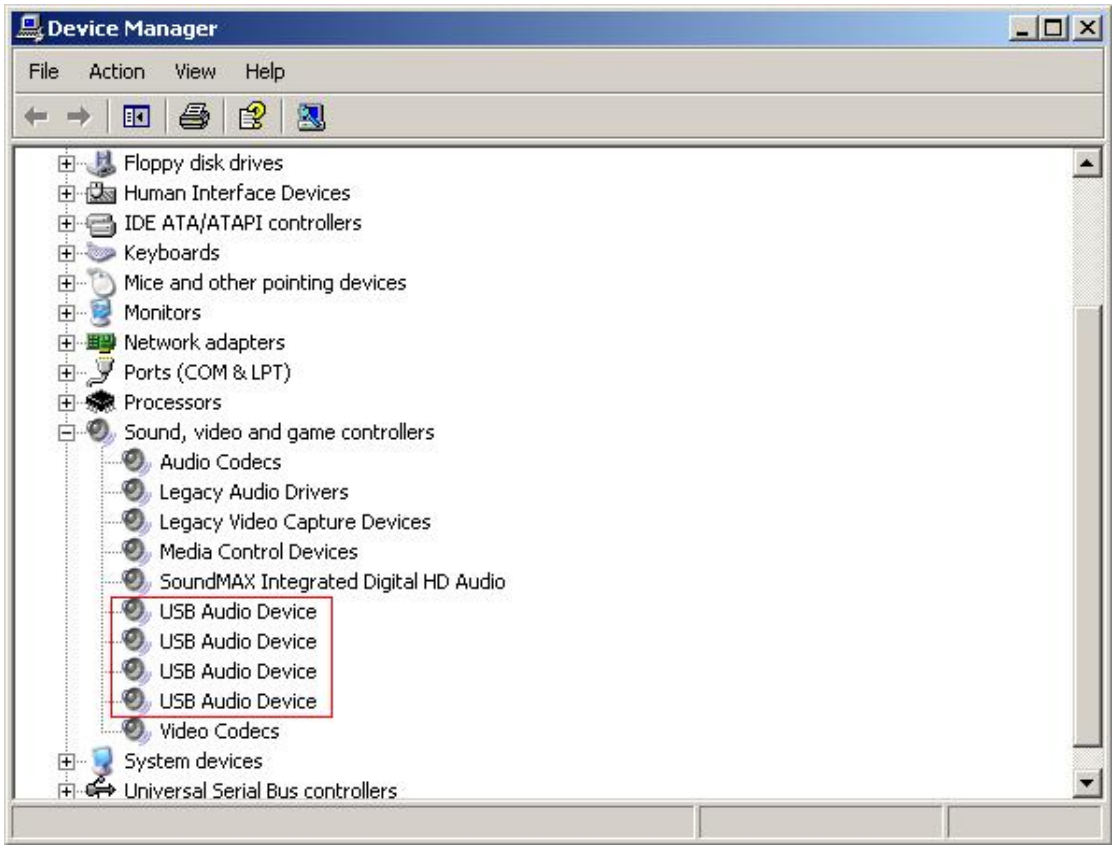


4. If SkyGW-404 connects with the server PC successfully, user will find 4 USB audio devices (USBAudio00 ~ USBAudio03) in Windows Device Manager. Go to **“Start”** menu from the left bottom corner of Windows desktop→**“Control Panel”→“System”→“System Properties”→“Hardware”→ “Device Manager”**, and then click **“Sound, video and game controllers”** to check USB audio device.

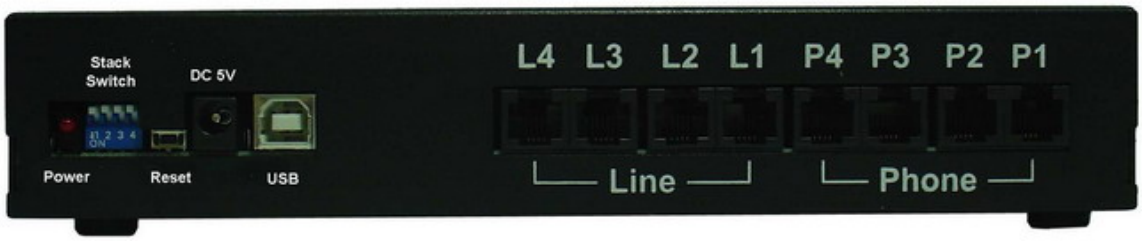
Windows Media Player
Windows Messenger
Files and Settings Transfer Wizard
Notepad
All Programs
My Computer
Control Panel
Set Program Access and Defaults
Administrative Tools
Printers and Faxes
Search
Run...
Log Off
Turn Off Computer
Start


Control Panel
File Edit View Favorites Tools Help
Back Search Folders
Address Control Panel
Control Panel
Switch to Category View
See Also
Windows Update
Help and Support
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Automatic Updates
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel(R) GMA Driver
Internet Options
Keyboard
Mouse
Network Connections
Network Setup Wizard
Phone and Modem ...
Portable Media Devices
Power Options
Printers and Faxes
Regional and Language ...
Scanners and Cameras
Scheduled Tasks
Security Center
SoundMAX
Sounds and Audio Devices
Speech
System
Taskbar and Start Menu
User Accounts
Windows Firewall
Wireless Network Set...
See information about your computer system, and change settings for hardware, performance, and aut

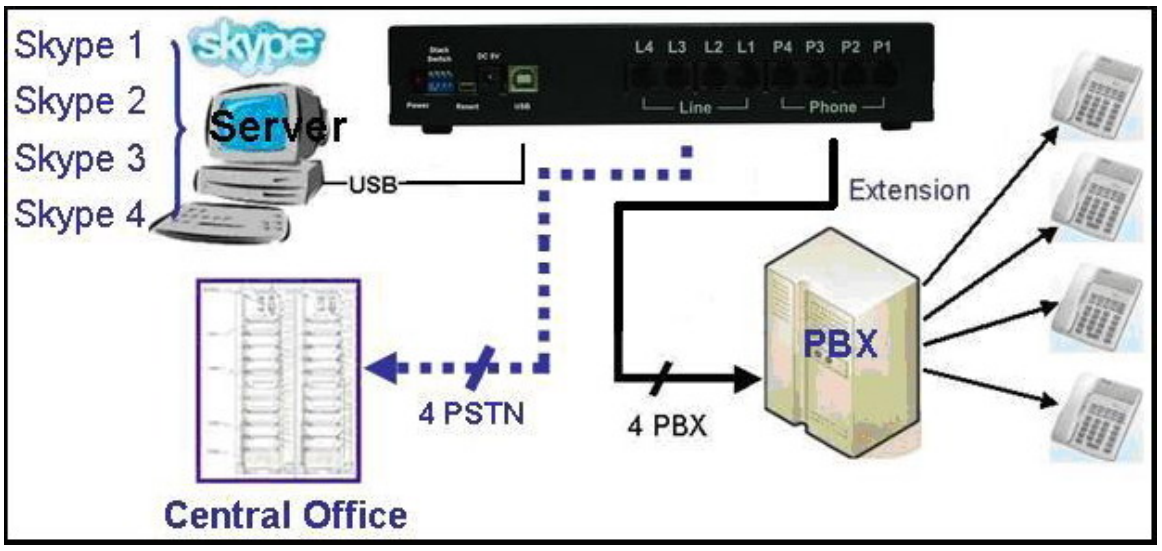

System Properties
Advanced
Automatic Updates
Remote
General
Computer Name
Hardware
Device Manager
The Device Manager lists all the hardware devices installed on your computer. Use the Device Manager to change the properties of any device.
Device Manager
Drivers
Driver Signing lets you make sure that installed drivers are compatible with Windows. Windows Update lets you set up how Windows connects to Windows Update for drivers.
Driver Signing
Windows Update
Hardware Profiles
Hardware profiles provide a way for you to set up and store different hardware configurations.
Hardware Profiles
OK
Cancel
Apply


Device Manager
File
Action
View
Help
Floppy disk drives
Human Interface Devices
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
Monitors
Network adapters
Ports (COM & LPT)
Processors
Sound, video and game controllers
Audio Codecs
Legacy Audio Drivers
Legacy Video Capture Devices
Media Control Devices
SoundMAX Integrated Digital HD Audio
USB Audio Device
USB Audio Device
USB Audio Device
USB Audio Device
Video Codecs
System devices
Universal Serial Bus controllers

4.3 Connect SkyGW-404 to PBX



1. Connect SkyGW-404 Phone 1 port to PBX's trunk port 1, Phone 2 port to PBX's trunk port 2, Phone 3 port to PBX's trunk port 3, and Phone 4 port to PBX's trunk port 4.
2. Connect Line1 port ~ Line 4 port of SkyGW4 to landlines. This can be an option and user can decide whether SkyGW-404 supports PSTN function or not.
3. Assign a hunting group number for these PBX trunk ports.
   Example: Set number "0" for PBX PSNT line hunting
   and number "9" for SkyGW-404 VoIP line hunting.



5. Install SkyGW4 Software

This section guides user how to install SkyGW4 software into a server PC.

5.1 SkyGW4 Software Installation

Before installing SkyGW4 software, please verify the following items.

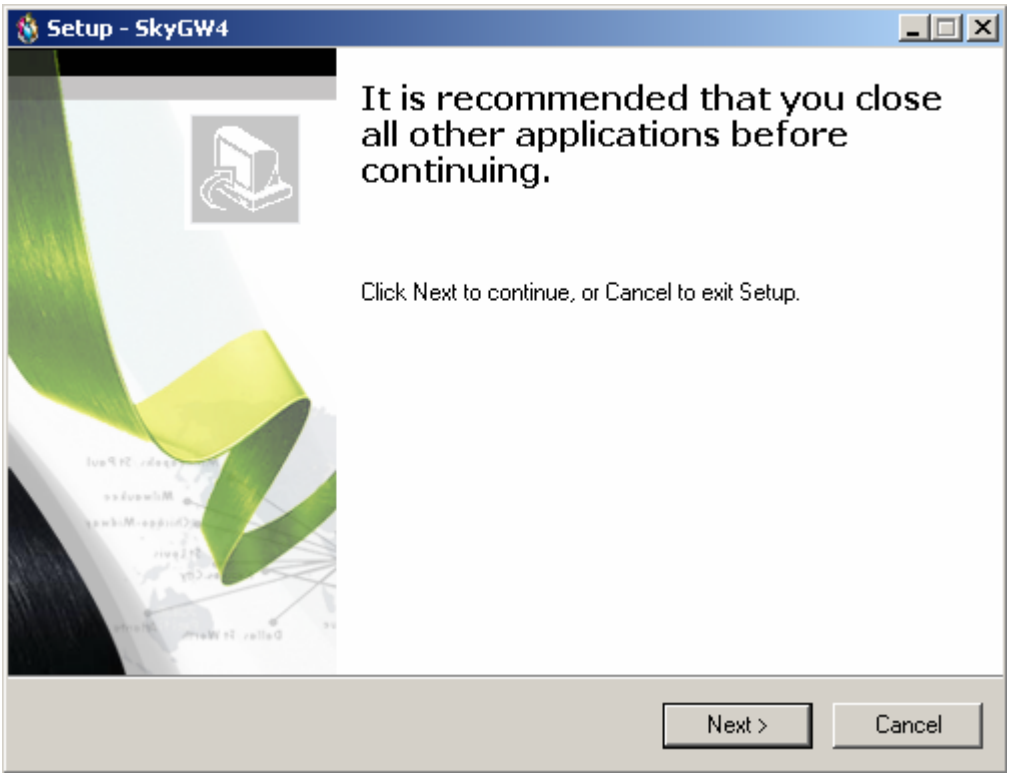
1. Please make sure Skype 2.5, 3.0(above 3.0.0.216) or 3.1 is installed.
2. Please make sure 4 registered Skype accounts including one cooperate account are registered.
3. Please make sure SkyGW-404 is connected with SkyGW-404 server PC

.

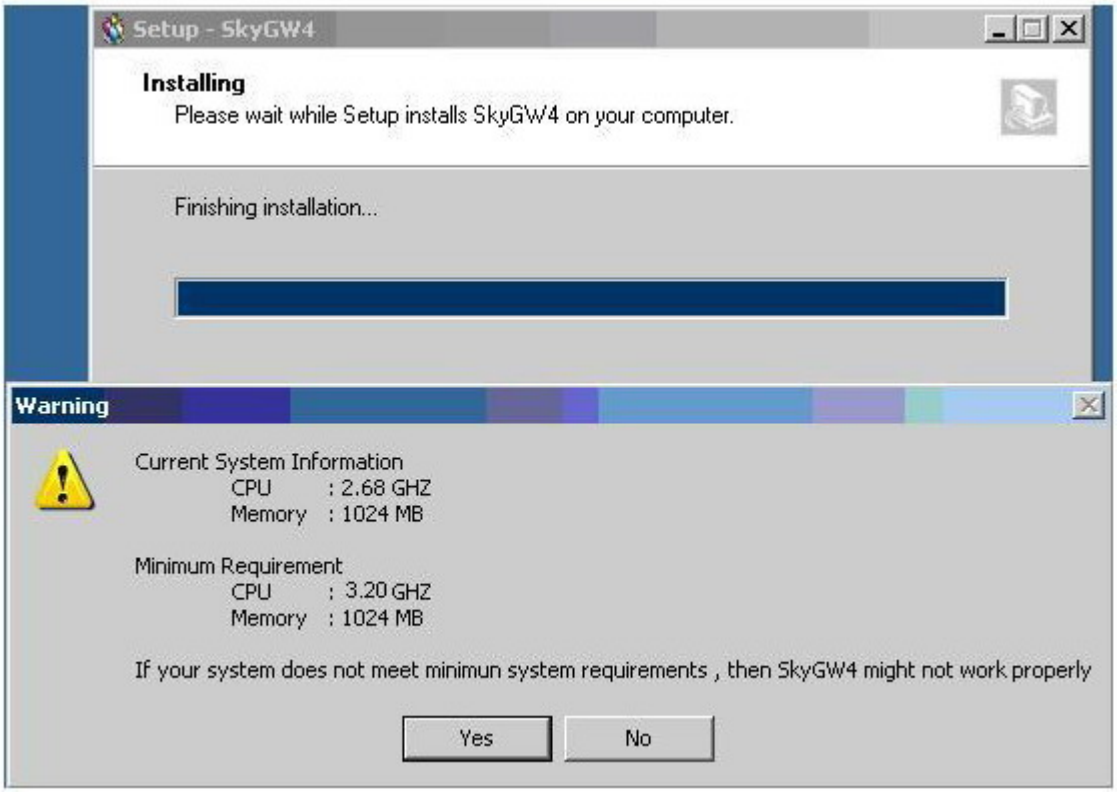
To install SkyGW4 software:

Step1: Insert the **Installation CD** into the CD-ROM drive of the computer. SkyGW4 installation screen will pop out. Click **Install** to start to install SkyGW4 software.

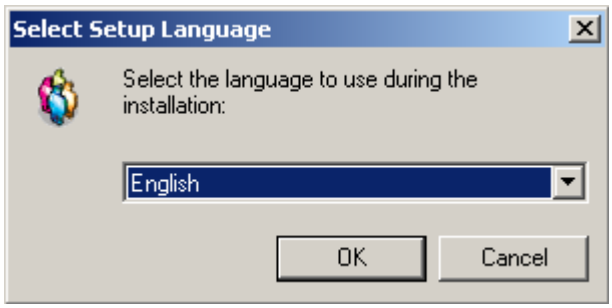
Step2: There comes a window to recommend administrator to close all other applications before continuing to install SkyGW4 as below:



After clicking Next button, if SkyGW4 server PC can't meet minimum system requirements, a warning message will pop out. User can choose to continue installation or not.

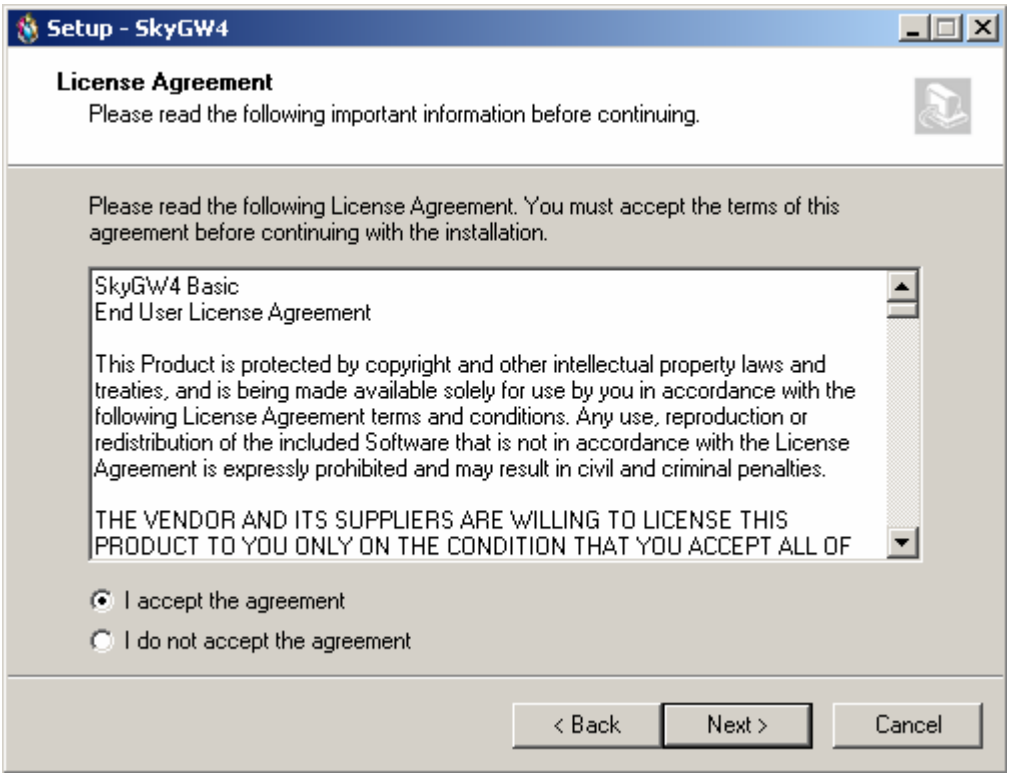


Step 3: The window of **“Select Setup Language”** will show up, administrator can select a preferred language by scrolling down the selection bar as the figure below, and then click **“OK”** to continue next step.



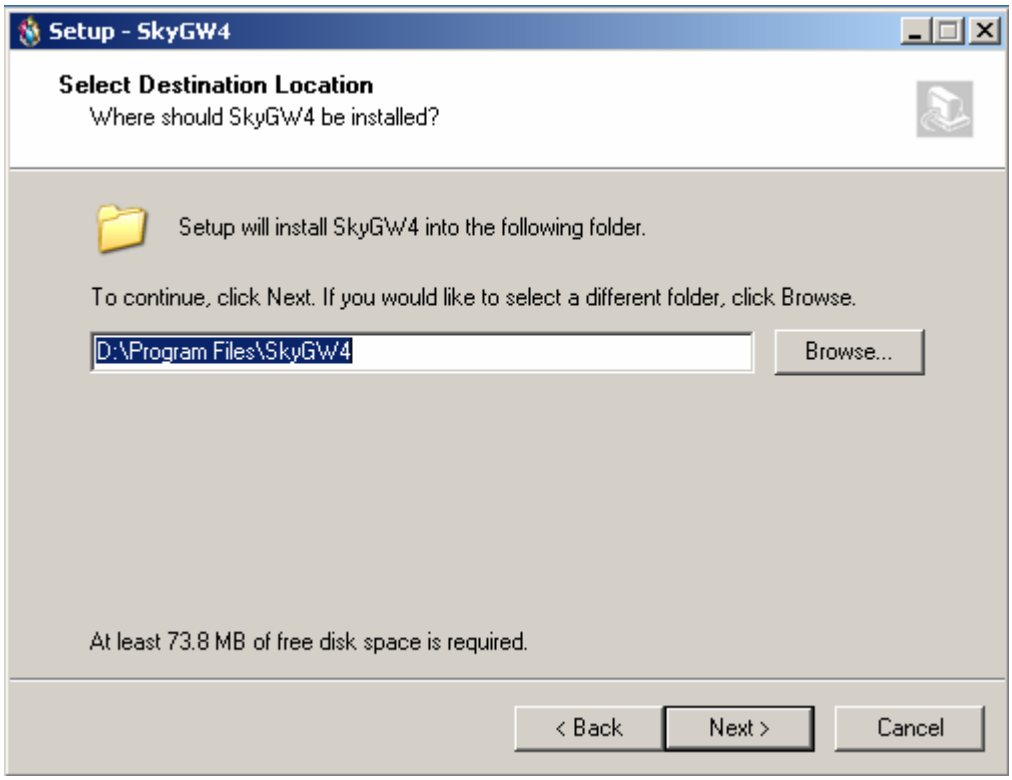
Step 4: The window of **“Welcome to SkyGW4 Setup Wizard”** pops out. Read the on-screen instructions and click **“Next”** to continue next step, as the figure below:

Step 5: The window of **“License Agreement”** pops out. After reading content of the agreement carefully, please check the box of **“I accept the agreement”**. And then click **“Next”** to continue next step.

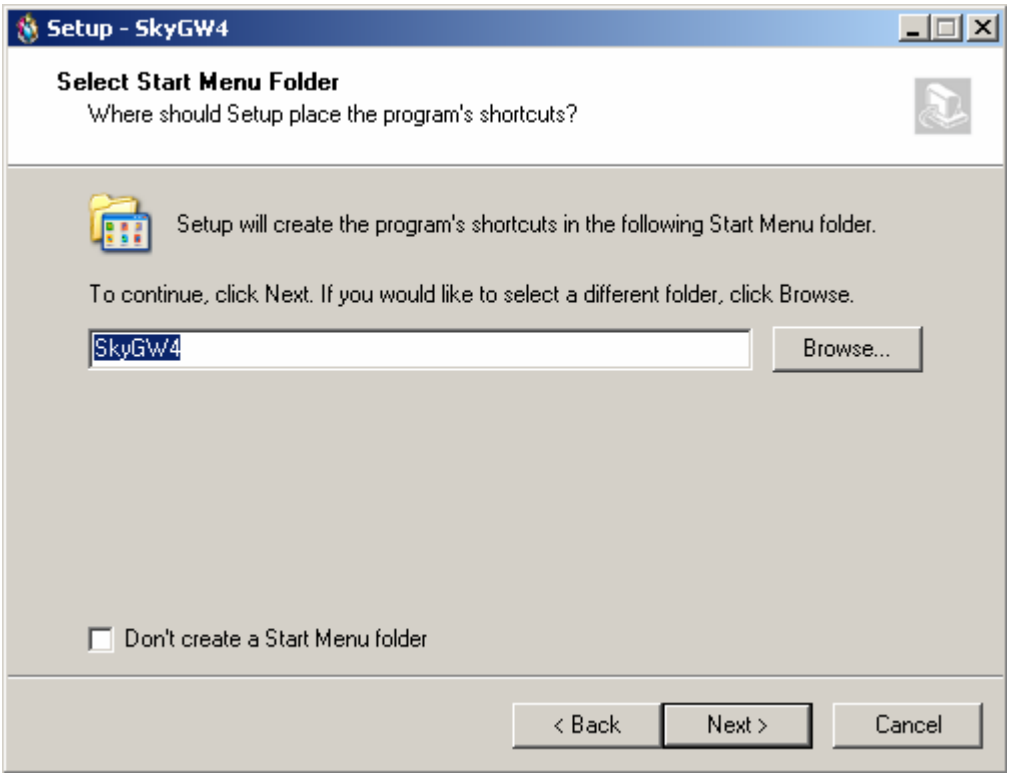


【Notice】User can click **“ Back”** to go back to the previous step anytime during the installation.

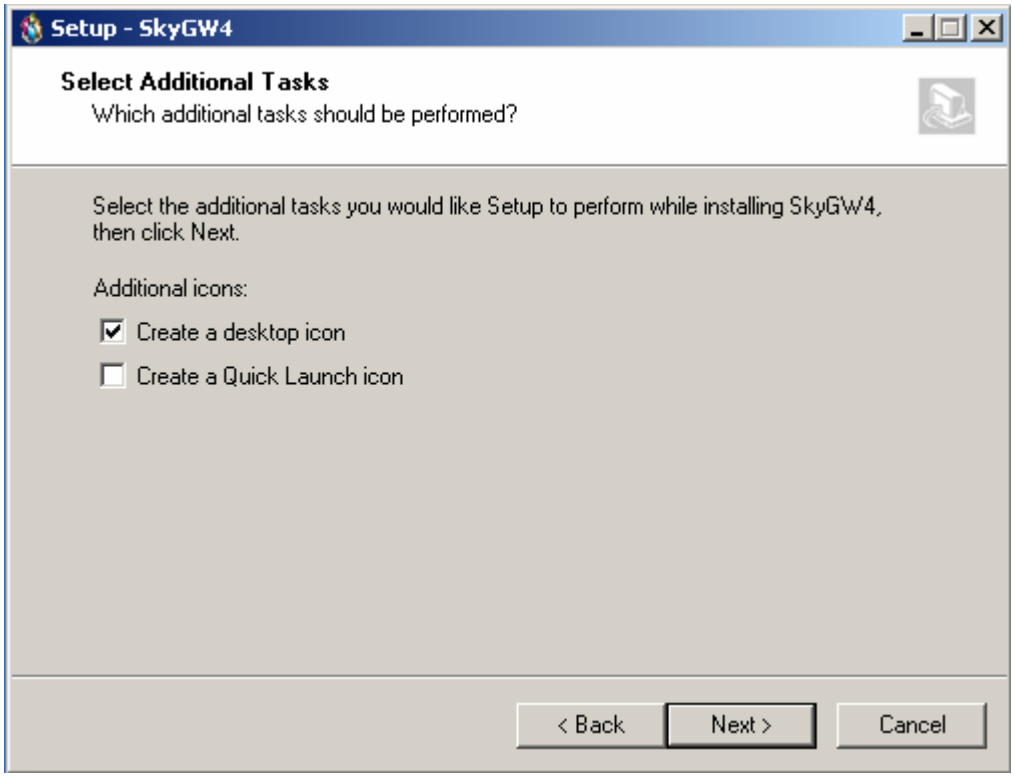
Step 6: In the next window of **“Select Destination Location”**, designate a folder for the installation. If this is not a preferred folder for administrator, click**”** **Browse”** and choose a folder from the list. After deciding which folder for the installation, user can click**”** **Next”** to continue.



Step 7: In the next window of **“Select Start Menu Folder”,** choose a preferred folder for SkyGW4 program’s shortcuts in Start Menu folder. If this is not a preferred folder, click **“Browse”** and choose a folder from the list. User can choose not to create a Start Menu folder by check the box of **“Don’t create a Start Menu folder”**, and click **“Next”** when the setting is done.

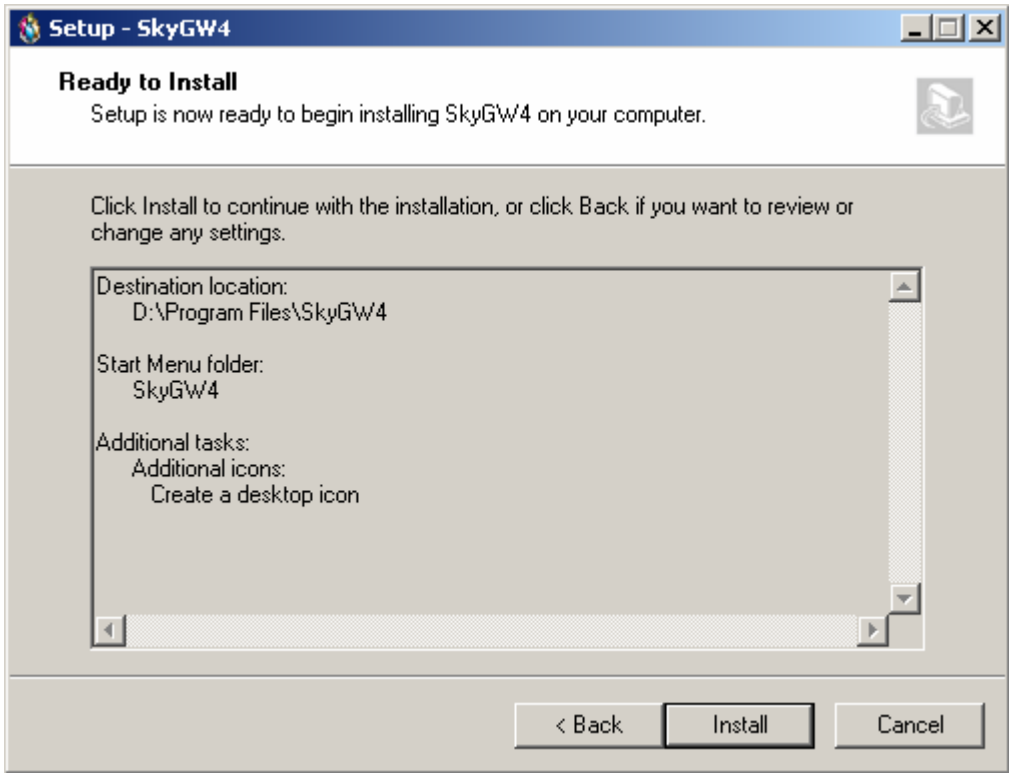


Step 8: In the next window of **"Select Additional Tasks"**, there are options for **"Create a desktop icon"** or **"Create a Quick Launch icon"**. Check the appropriate box as desired. After SkyGW4 AP is launched, the desktop icons will appear on the computer desktop and the quick launch icon will appear in the left bottom corner of the Windows screen. Click **"Next"** to continue.



Step 9: The next window contains the related installation information and allows the

user to select to start the installation. Carefully examine the configurations. If configurations need to be changed, click **“Back”** to make necessary modifications. If not, click **“Install”** to start the installation.



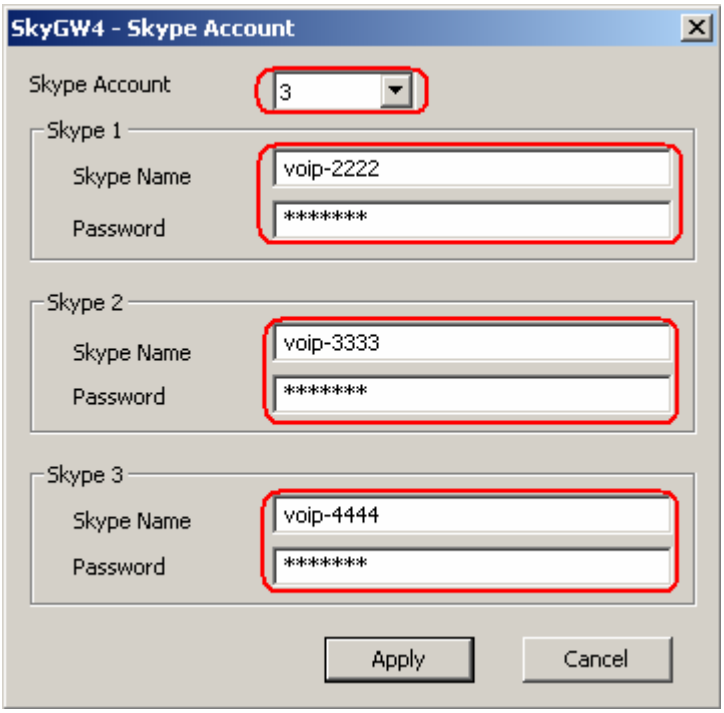
Step 10: After finishing installation of SkyGW4, the window of **“Completing the SkyGW4 Setup Wizard”** will pop out and user can choose to check the **“Launch Check Tomcat”** and **“Launch SkyGW4”** boxes. Click **“Finish”** to finish the setup, as the figure below.

【Notice】After completing the installation of SkyGW4 software, please do not stop two DOS programs(Tomcat & Start SkyGW4 Web Server). These two programs are used for Web server management.

Step 11: If administrator attempts to launch SkyGW4 in previous step, Skype will invoke one warning window **"Another program wants to use Skype".** Select **"Allow this program to use Skype"** or **"Allow this program to use Skype, but ask again in the future"**. Then click **"OK"**.

【Notice】 Please do not select the option of **"Do not allow this program to use Skype".** If this option has been chosen, and user still wants to use SkyGW4, please refer to **Skype Privacy Setting** for solution.

Step 12: After finishing SkyGW4 setup successfully, Sub Skype Accounts setting window will pop out. Administrator could set 1 to 3 Skype Accounts according to own demand.



Enter Skype name and password and select **“Apply”.** Administrator could see the exact Skype icon numbers at the right corner bottom of Windows desktop as the figure below.